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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,040	06/15/2004	Ing-Jer Chiou	12340-US-PA	4039

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JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

VERDIER, CHRISTOPHER M

ART UNIT PAPER NUMBER

3745

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,040

Applicant(s)

CHIOU ET AL.

Examiner

Christopher Verdier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Specification

The disclosure is objected to because it is replete with clerical and grammatical errors too numerous to mention in all of their instances. The following are several examples of defects. The specification should be carefully proofread for additional defects. Appropriate correction is required.

On page 1, line 1, "Description" is superfluous and should be deleted.

On page 1, line 2, "[" and "]" should be deleted.

In paragraph 4, line 12, "computer" should be changed to -- computers --.

In paragraph 5, line 12, "exhaust" should be changed to -- is exhausted --.

In paragraph 6, line 10, "small" should be changed to -- a small --.

In paragraph 6, line 12, "device" should be changed to -- devices --.

In paragraph 18, line 11, "214a" should be changed to -- 210b --.

In paragraph 20, last two lines, the statement that the fins 230 are laid in a direction parallel to the length of the air outlet 216 is inaccurate; the fins are laid perpendicular to the length of the air outlet.

Claim Objections

Claims 3 and 8 are objected to because of the following informalities: Appropriate correction is required.

In claim 3, line 2, "the" should be changed to -- a --.

In claim 3, line 3, "the" (second occurrence) should be changed to -- an --.

In claim 8, line 2, "the" should be changed to -- a --.

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In claim 8, line 3, "the" (second occurrence) should be changed to -- an --.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3, line 3, "thereof" is unclear if this refers to the fins, or the first protruding sections. In claim 8, line 3, "thereof" is unclear if this refers to the fins, or the second protruding sections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3 (as far as claim 3 is definite and understood), and 11-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin 6,751,097 (figures 2-4). Note the fan module,

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comprising a casing 30, having an unnumbered mounting space, an air inlet 32 and an air outlet 33, wherein the air inlet and the air outlet are linked through the mounting space, an unnumbered fan, disposed within the mounting space, and a plurality of fins 20, 20', disposed across the air outlet and laid parallel to each other, wherein each fin has a plurality of first protruding sections 23 protruding from a surface of the fin for separating neighboring fins from each other, and the fins partition the air outlet into a plurality of narrow slots having a width smaller than 1 mm.

Concerning claim 11, note that the length of the air outlet 33 may be designated as extending in the direction of flow through the air outlet, such that the air outlet 33 is perpendicular to the direction where the fins are stacked. Concerning claim 12, note that the length of the air outlet 33 may be designated as extending in the direction of flow through the air outlet 33, such that the length of the air outlet is parallel to the length of the fins. Claim 3, which recites that the first protruding sections are formed by bending the cut portion of the fins relative to the uncut portion thereof, is a product-by-process claim. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product-by-process claim does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin 6,751,097. Lin discloses a fan module substantially as claimed as set forth above, with the plural narrow slots having a width smaller than 1 mm. However, Lin does not explicitly disclose that the slot width is between about 0.8 to 1 mm.

The recitation of the specific slot width is a matter of choice in design. Lin discloses that the slot width is smaller than 1 mm, for the purpose of preventing alien articles from entering into the housing through the narrow slots. Due to the fact that Lin discloses that the slot widths are less than 1 mm, which is considered to be a very small value, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to select the size of the slot width to be a specific value, such as in the range of between about 0.8 to 1 mm, for the

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purpose of preventing alien articles of specific smaller sizes from entering into the housing through the narrow slots.

Claims 1-13 (as far as claims 3 and 8 are definite and understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahara 6,439,299 in view of Lin 6,751,097. Miyahara (figures 1-4) discloses a fan module substantially as claimed, comprising a casing 1/16, having an unnumbered mounting space near 4a, an air inlet 16a and an air outlet 18, wherein the air inlet and the air outlet are linked through the mounting space, a fan 4, disposed within the mounting space, and a plurality of fins 10-14, disposed across the air outlet and laid parallel to each other, wherein each fin has a plurality of unnumbered first protruding sections (adjacent to and connected to element 8 in figure 3) protruding from a surface of the fin for separating neighboring fins from each other, and the fins partition the air outlet into a plurality of narrow slots. As seen in figure 1, an inner wall 1c of the casing at the air outlet separates from the nearest fin near 9 through the first protruding sections to form another narrow slot. Each of the fins is shaped into a long strip and the first protruding sections (near 5 and 9 in figure 1) are located at each end of the corresponding fin. The first protruding sections are also located in the middle of the corresponding fin near 7 in figure 1. Each of the fins further comprises a plurality of second protruding sections (see figures 3 and 4) protruding from another surface of the corresponding fin, which is opposite from the surface of the fin that separates neighboring fins from each other, as recited in claim 1, lines 8-9. As seen in figure 1, the inner wall 1a of the casing at the air outlet separates from the nearest fin near 5 through the second protruding sections to form another narrow slot. Each of the fins is shaped into a long strip and the second

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protruding sections (near 5 and 9 in figure 1) are located at each end of the corresponding fin.

Concerning claim 11, note that the length of the air outlet is perpendicular to the direction where the fins are stacked. Concerning claim 12, note that the length of the air outlet is parallel to the length of the fins. The casing further comprises a cover plate 16 and a base 1 such that the air inlet 16a is formed on the cover plate, the air outlet 18 is formed by combining the inner wall of the cover plate and the base and the fins 10-14 are joined to the cover plate via pillar members 5-9. Concerning claim 3, which recites that the first protruding sections are formed by bending the cut portion of the fins relative to the uncut portion thereof, this is a product-by-process claim as set forth above. Concerning claim 8, which recites that the second protruding sections are formed by bending the cut portion of the fins relative to the uncut portion thereof, this is a product-by-process claim as set forth above.

However, Miyahara does not disclose that the narrow slots have a width smaller than 1 mm (claim 1), and does not disclose that the narrow slots each have a width between about 0.8 to 1 mm (claim 10).

Lin (figures 2-4) shows a fan module comprising a housing 30 having an air outlet 33, with plural fins 20 fitted inside the air outlet to divide the air outlet into a plurality of narrow slots, with each of the slots having a width smaller than 1 mm, for the purpose of preventing alien articles from entering into the housing through the narrow slots.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to form the fan module of Miyahara such that the narrow slots have a width smaller than 1 mm, as taught by Lin, for the purpose of preventing alien articles into the housing through the narrow slots.

The recitation of the specific slot width in claim 10 being between about 0.8 to 1 mm is a matter of choice in design. Lin teaches that the slot width is smaller than 1 mm, for the purpose of preventing alien articles from entering into the housing through the narrow slots. Due to the fact that Lin teaches that the slot widths are less than 1 mm, which is considered to be a very small value, it would have been further obvious at the time the invention was made to a person having ordinary skill in the art to select the size of the slot width in the modified fan of Miyahara to be a specific value, such as in the range of between about 0.8 to 1 mm, for the purpose of preventing alien articles of specific smaller sizes from entering into the housing through the narrow slots.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishida and Ko are cited to show fan modules with fins joined to housing cover plates.

Lee, Bookhardt, Huang, Lin '501, and Tanaka are cited to show various fan modules with fins.

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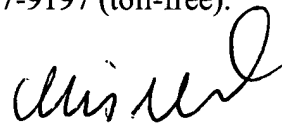
Young, McCarty, Kunz, Franklin, Mead, Redetzke, and Aoki are cited to show various fans with outlet grilles formed of fins with protruding sections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Verdier whose telephone number is (571) 272-4824. The examiner can normally be reached on Monday-Friday from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward K. Look can be reached on (571) 272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.V.
December 30, 2005



Christopher Verdier
Primary Examiner
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